

12-05-01

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IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

INVENTOR(S) Jonathan H. Fischer

CASE 41

TITLE Optical Source Driver with
Improved Input Stage

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

NEW APPLICATION UNDER 37 CFR §1.53(b)

Enclosed are the following papers relating to the above-named application for patent:

Specification
5 Sheets of informal drawing(s)
1 Assignment with Cover Sheet
Declaration and Power of Attorney
Information Disclosure Statement with Form PTO-1449 and cited reference(s)

CLAIMS AS FILED				
	NO. FILED	NO. EXTRA	RATE	CALCULATIONS
Total Claims	18-20 =	0	x \$18 =	\$0
Independent Claims	4-3 =	1	x \$84 =	\$84
Multiple Dependent Claim(s), if applicable			\$280 =	\$0
Basic Fee				\$740
TOTAL FEE:				\$824

Please file the application and charge **Agere Systems Deposit Account No. 50-1735** the amount of \$824, to cover the filing fee. Duplicate copies of this letter are enclosed. In the event of non-payment or improper payment of a required fee, the Commissioner is authorized to charge or to credit **Deposit Account No. 50-1735** as required to correct the error.

The Assistant Commissioner for Patents is hereby authorized to treat any concurrent or future reply, requiring a petition for extension of time under 37 CFR §1.136 for its timely submission, as incorporating a petition for extension of time for the appropriate length of time if not submitted with the reply.

"Express Mail" Label No. EL793517275US

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231

Date of Deposit: November 15, 2001

Signature: Leesa M. Hamlin

J1040 U.S. PTO
10/002028
11/15/01

J1048 U.S. PTO
11/15/01

J1040 U.S. PTO
10/002028
11/15/01

Method	Time	Accuracy	Cost	Scalability	Flexibility	Interpretability	Robustness	Efficiency	Reliability
Linear Regression	Low	Low	Low	High	High	High	High	High	High
Decision Trees	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Support Vector Machines	High	High	High	Low	Low	Low	Low	Low	Low
Neural Networks	Very High	Very High	Very High	Low	Low	Low	Low	Low	Low
Bayesian Networks	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Ensemble Methods	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
Deep Learning	Very High	Very High	Very High	Low	Low	Low	Low	Low	Low
Gradient Boosting	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
Random Forests	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
Naive Bayes	Low	Low	Low	High	High	High	High	High	High
K-Nearest Neighbors	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Logistic Regression	Low	Low	Low	High	High	High	High	High	High
AdaBoost	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
XGBoost	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
LightGBM	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
CatBoost	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
AutoML	Very High	Very High	Very High	Low	Low	Low	Low	Low	Low
Hyperparameter Tuning	High	High	High	Medium	Medium	Medium	Medium	Medium	Medium
Feature Engineering	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Model Selection	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Cross-Validation	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Model Interpretability	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Model Deployment	High	High	High	Low	Low	Low	Low	Low	Low
Model Monitoring	High	High	High	Low	Low	Low	Low	Low	Low
Model Maintenance	High	High	High	Low	Low	Low	Low	Low	Low
Model Evaluation	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Model Documentation	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Model Collaboration	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Model Governance	High	High	High	Low	Low	Low	Low	Low	Low
Model Compliance	High	High	High	Low	Low	Low	Low	Low	Low
Model Security	High	High	High	Low	Low	Low	Low	Low	Low
Model Privacy	High	High	High	Low	Low	Low	Low	Low	Low
Model Transparency	High	High	High	Low	Low	Low	Low	Low	Low
Model Accountability	High	High	High	Low	Low	Low	Low	Low	Low
Model Fairness	High	High	High	Low	Low	Low	Low	Low	Low
Model Bias Mitigation	High	High	High	Low	Low	Low	Low	Low	Low
Model Explainability	High	High	High	Low	Low	Low	Low	Low	Low
Model Auditability	High	High	High	Low	Low	Low	Low	Low	Low
Model Reliability	High	High	High	Low	Low	Low	Low	Low	Low
Model Consistency	High	High	High	Low	Low	Low	Low	Low	Low
Model Stability	High	High	High	Low	Low	Low	Low	Low	Low
Model Robustness	High	High	High	Low	Low	Low	Low	Low	Low
Model Generalization	High	High	High	Low	Low	Low	Low	Low	Low
Model Adaptability	High	High	High	Low	Low	Low	Low	Low	Low
Model Scalability	High	High	High	Low	Low	Low	Low	Low	Low
Model Flexibility	High	High	High	Low	Low	Low	Low	Low	Low
Model Interoperability	High	High	High	Low	Low	Low	Low	Low	Low
Model Compatibility	High	High	High	Low	Low	Low	Low	Low	Low
Model Portability	High	High	High	Low	Low	Low	Low	Low	Low
Model Reusability	High	High	High	Low	Low	Low	Low	Low	Low
Model Reproducibility	High	High	High	Low	Low				

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